



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,551	03/25/2004	Yasushi Yatsuda	ST3001-0039	4915
39083	7590	09/23/2005		
CERMAK & KENEALY, LLP 515 EAST BRADDOCK RD SUITE B Alexandria, VA 22314			EXAMINER DUNWIDDIE, MEGHAN K	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/808,551	Applicant(s) YATSUDA ET AL.	
	Examiner Meghan K. Dunwiddie	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 17-23 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/25/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

This Office Action is a Non-Final Rejection in response to the application filed on March 25, 2004 by **Yatsuda et al.**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. Figures 22-31 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
3. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

Art Unit: 2875

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 14-16, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yatsuda et al.** (US 2004/0251469) in view of **Takekuma** (US 6850001).

6. Regarding Claim 1, **Yatsuda et al.** shows a light source device [Figure 2: (1)], comprising:

- A base [Figure 2: (3)] having an upper surface and a cavity located at the upper surface [See Figure 2];
- An LED chip [Figure 2: (2)] located adjacent the cavity of the base [Figure 2: (3)];
- An optical member [Figure 2: (6)] disposed above the base [Figure 2: (3)] and apart from the LED chip [Figure 2: (2)] and having an inner surface;
- And a light shielding portion [Figure 2: (7)] disposed on the inner surface of the optical member [Figure 2: (6)] and configured to form a cutoff suited for a light distribution pattern.

7. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

Art Unit: 2875

8. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

9. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

10. Regarding Claim 2, **Yatsuda** et al. shows:

- A base [Figure 2: (3)] including a heat radiating core [See page 2 paragraph [0038]].

11. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

Art Unit: 2875

12. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

13. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

14. Regarding Claim 3, **Yatsuda** et al. shows:

- A base [Figure 2: (3)]

15. **Yatsuda** et al. does not show:

- The base is formed from a ceramic material.

Art Unit: 2875

16. **Takekuma** teaches:

- The base [Figure 1: (30)] is formed from a ceramic material [See column 3 lines 15-16].

17. It would have been obvious for one of ordinary skill in the art, at the time of the invention to form the base of **Yatsuda et al.** from a ceramic as taught in **Takekuma** for the purpose and advantage of providing a more cost effective manufacturing process of the light source device.

18. Regarding Claim 4, **Yatsuda et al.** shows:

- An optical member [Figure 2: (6)].

19. **Yatsuda et al.** does not show:

- The optical member is a lens.

20. **Takekuma** teaches:

- The optical member is a lens [Figure 1: (20)].

21. It would have been obvious for one of ordinary skill in the art, at the time of the invention to create the optical member in **Yatsuda et al.** as a lens as taught in **Takekuma** for the purpose and advantage of refracting the light rays emitted from the LED chip in **Yatsuda et al.** so that they can converge or diverge to form an image.

Art Unit: 2875

22. Regarding Claim 5, **Yatsuda** et al. shows:

- The optical member is a flat cover [Figure 2: (6)].

23. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

24. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

25. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.



Art Unit: 2875

26. Regarding Claim 6, **Yatsuda et al.** shows:

- The light shielding portion [Figure 2: (7)] is positioned within 2mm from the LED chip [See page 3 [0052] lines 10-15].

27. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

28. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

29. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

30. Regarding Claim 7, **Yatsuda et al.** shows:

- The light shielding portion includes a thin film [Figure 2: (7)] formed adjacent the inner surface of the optical member [Figure 2: (6)]

31. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

32. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

33. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

34. Regarding Claim 8, **Yatsuda** et al. shows:

- The light shielding portion includes a plate member [Figure 2: (7)] adhered to the inner surface of the optical member [Figure 2: (6)].

35. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

36. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

37. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

38. Regarding Claim 9, **Yatsuda et al.** shows:

- The plate member [Figure 2: (7)] has a given thickness along the optical axis [See Figure 7].

39. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

40. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

41. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

42. Regarding Claim 10, **Yatsuda** et al. shows:

- A second light shielding portion disposed on an outer surface of the optical member [Figure 8].

43. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

44. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

45. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

46. Regarding Claim 11, **Yatsuda et al.** shows:

- An inner surface of the light shielding portion [Figure 2: (7)] includes a reflection surface [See page 3 paragraphs [0050-0051]].

47. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

48. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

49. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

50. Regarding Claim 14, **Yatsuda et al.** shows:

- The reflection surface includes a thin metal film formed on the light shielding portion [See page 2 paragraph [0045] lines 7-8].

51. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

52. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

53. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

Art Unit: 2875

54. Regarding Claim 15, **Yatsuda** et al. shows:

- The reflection surface includes a surface of the light shielding portion made of metallic material [See page 2 paragraph [0045] lines 7-8].

55. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

56. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

57. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.



Art Unit: 2875

58. Regarding Claim 16, **Yatsuda** et al. shows:

- A base [Figure 2: (3)] having an upper surface and a cavity located at the upper surface [See Figure 2];
- An LED chip [Figure 2: (2)] located adjacent the cavity of the base [Figure 2: (3)];
- An optical member [Figure 2: (6)] disposed above the base [Figure 2: (3)] and apart from the LED chip [Figure 2: (2)] and having an inner surface;
- And a light shielding portion [Figure 2: (7)] disposed on the inner surface of the optical member [Figure 2: (6)] and configured to form a cutoff suited for a light distribution pattern.

59. **Yatsuda** et al. does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.
- The fluorescent substance layer is formed in thin film form.

60. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];
- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

Art Unit: 2875

- The fluorescent substance layer is formed in thin film form [].

61. It would have been obvious for one of ordinary skill in the art, at the time of the invention to form the fluorescent substance layer shown in **Yatsuda et al.** in a thin film form as taught by **Takekuma** for the purpose and advantage of obtaining good sealing properties of the light source device.

62. Regarding Claim 24, **Yatsuda et al.** shows:

- A projection lens [Figure 4: (10)] disposed adjacent the light source device [Figure 4: (1)] and having a focus located in the vicinity of the light shielding portion [Figure 2: (7)], wherein the projection lens [Figure 4: (10)] is configured to irradiate emission light forward in a shape defined by the light shielding portion [Figure 2: (7)].

63. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

64. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];

Art Unit: 2875

- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

65. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda et al.** for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda et al.** with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

66. Regarding Claim 25, **Yatsuda et al.** shows:

- The light shielding portion [Figure 2: (7)] is positioned within 1mm from the LED chip [See page 3 [0052] lines 10-16].

67. **Yatsuda et al.** does not show:

- A resin portion located adjacent the LED chip;
- A fluorescent substance layer disposed at least in a region other than the light shielding portion on the inner surface of the optical member.

68. **Takekuma** teaches:

- A resin portion [Figure 1: (70)] located adjacent the LED chip [Figure 1: (50)];

Art Unit: 2875

- A fluorescent substance layer [Figure 1: (60)] disposed at least in a region other than the light shielding portion on the inner surface of the optical member [Figure 1: (20)].

69. It would have been obvious for one of ordinary skill in the art, at the time of the invention to include a resin portion and fluorescent substance layer as taught in **Takekuma** with the light source device of **Yatsuda** et al. for the purpose and advantage of obtaining good sealing properties around the LED chip in **Yatsuda** et al. with the resin portion taught by **Takekuma** and also for converting some of the light emitted from the LED chip into outgoing light by the fluorescent substance layer also taught by **Takekuma**.

70. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yatsuda** et al. (US 2004/0251469) in view of **Amano** (US 2004/0008516).

71. Regarding Claim 12, **Yatsuda** et al. shows:

- A reflection surface [Figure 2: (7)].

72. **Yatsuda** et al. does not show:

- The reflection surface is disposed at a slant so as to reflect light from the LED chip.

Art Unit: 2875

73. **Amano** teaches:

- The reflection surface is disposed at a slant so as to reflect light from the LED chip [See Figure 9].

74. It would have been obvious for one of ordinary skill in the art, at the time of the invention to dispose the reflection surface shown in **Yatsuda** et al. at a slant as taught by **Amano** for the purpose and advantage of providing an alternate way of reflecting the light from the LED chip.

75. Regarding Claim 13, **Yatsuda** et al. shows:

- The light source device is configured to emit light along an optical axis, and the base cavity includes a second reflection surface confronting the reflection surface of the light shielding portion and the second reflection surface is configured to reflect reflected light from the reflection surface of the light shielding portion toward the optical axis [See Figures 7 and 8].

76. **Yatsuda** et al. does not show:

- The reflection surface is disposed at a slant so as to reflect light from the LED chip.

77. **Amano** teaches:

- The reflection surface is disposed at a slant so as to reflect light from the LED chip [See Figure 9].

Art Unit: 2875

78. It would have been obvious for one of ordinary skill in the art, at the time of the invention to dispose the reflection surface shown in **Yatsuda et al.** at a slant as taught by **Amano** for the purpose and advantage of providing an alternate way of reflecting the light from the LED chip.

***Allowable Subject Matter***

79. Claims 4, 19-23, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

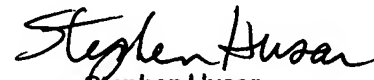
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKD

  
Stephen Husar  
Primary Examiner